

INFORMATION DISCLOSURE CITATION IN AN APPLICATION (Use several sheets if necessary) PTO Form 1449	Atty Docket No. 113190-064	Application No. 09/865,159
	Applicant Irvin et al.	
	Filing Date May 24, 2001	Group 1645

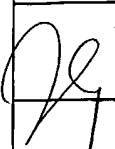

U.S. PATENT DOCUMENTS						
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JH	5,445,818	08-29-95	Hodges et al.			
	5,468,484	11-21-95	Hodges et al.			
	5,494,672	02-27-96	Hodges et al.			
	5,612,036	03-18-97	Hodges et al.			

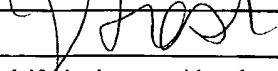
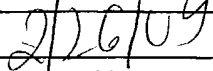
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JH	WO 95/31480	11-23-95	PCT				
	WO 97/12988	04-10-97	PCT				
	WO/ 98/52976	11-26-98	PCT				

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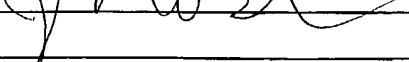
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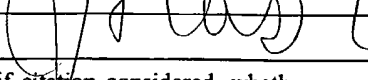
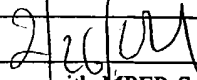
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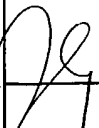

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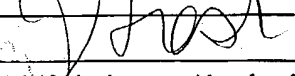
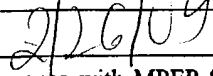
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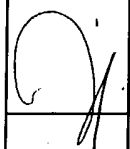

Examiner: <i>J. Graser</i>	Date Considered: 2/26/04
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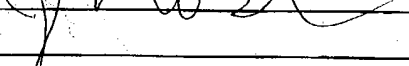
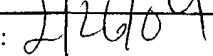
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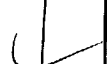
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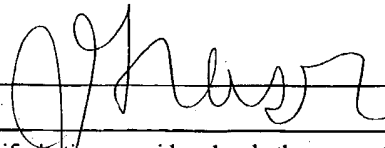
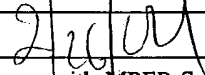
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Irvin et al.
Appl. No.: 09/865,159
Conf. No.: 3428
Filed: May 24, 2001
Title: PSEUDOMONAS TREATMENT COMPOSITION AND METHOD
Art Unit: 1645
Examiner: J. Graser
Docket No.: 113190-64

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with the provisions of 37 C.F.R. 1.56, 37 C.F.R. 1.97, and 37 C.F.R. 1.98, Applicants request that a citation and examination of the references cited below, and on the attached PTO-1449 form, copies of which are enclosed, be made during the course of examination of the above-identified application for United States patent.

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5,612,036	March 18, 1997	Hodges et al.

FOREIGN PATENT DOCUMENTS

<u>Document No.</u>	<u>Date</u>	<u>Country</u>
WO 95/31480	November 23, 1995	PCT
WO 97/12988	April 10, 1997	PCT
WO/ 98/52976	November 26, 1998	PCT

OTHER DOCUMENTS

Irvin, R.T. (1993) "Attachment and Colonization of *Pseudomonas aeruginosa*: Role of the Surface Structures", pp 19-42, Plenum Press, New York.

- Pier, G.B., (1985) "Pulmonary Disease Associated with *Pseudomonas aeruginosa* in Cystic Fibrosis: Current Status of the Host-Bacterium Interaction", *J. Infect. Dis.* 151:575-580.
- Rivera, M., *et al.* (1982) "*Pseudomonas aeruginosa* Mucoid Strain", *Am. Rev. Respir. Dis.* 126:833-836.
- Todd, T.R.J., *et al.* (1989) "Augmented Bacterial Adherence to Tracheal Epithelial Cells Is Associated with Gram-Negative Pneumonia in an Intensive Care Unit Population", *Am. Rev. Respir. Dis.* 140:1585-1589.
- Irvin, R.T., *et al.* (1989) "Characterization of the *Pseudomonas aeruginosa* Pilus Adhesin: Confirmation that the Pilin Structural Protein Subunit Contains a Human Epithelial Cell-Binding Domain", *Infect. Immun.* 57:3720-3726.
- Lee, K.K., *et al.* (1989) "Mapping the surface regions of *Pseudomonas aeruginosa* PAK pilin: the importance of the C-terminal region for adherence to human buccal epithelial cells," *Mol. Microbial.* 3:1493-1499.
- Doig, P., *et al.* (1987) "Characterization of the Binding of *Pseudomonas aeruginosa* Alginate to Human Epithelial Cells," *Infect. Immun.* 55:1517-1522.
- McEachran, D., *et al.* (1985) "Adhesion of *Pseudomonas aeruginosa* to human buccal epithelial cells: evidence for two classes of receptors", *Can. J. Microbial.* 31:563-569.
- Irvin, R.T., *et al.* (1990) "Usefulness of Equilibrium Parameters of Adhesion in Predicting the Outcome of Competition for Bacterial Receptor Sites on Respiratory Epithelial Cells by *Pseudomonas aeruginosa* Strains of Heterologous Pilus Type", *Microb. Ecol. Health Dis.* 3:39-47.
- Bradley, D.E. (1972) "A study of pili on *Pseudomonas aeruginosa*", *Genet. Res.* 19:39-51.
- Folkhard, W.F., *et al.* (1981) "Structure of Polar Pili from *Pseudomonas aeruginosa* Strains K and O", *J. Mol. Biol.* 149:79-93.
- Paranchych, W., *et al.* (1986) "Fimbriae (Pili): Molecular Basis of *Pseudomonas Aeruginosa* Adherence", *Clin Invest Med* 9:113-118.
- Paranchych, W., *et al.* (1990) "Expression, processing, and assembly of *Pseudomonas aeruginosa* N-methylphenylalanine pilin", in *Pseudomonas: Biotransformations, Pathogenesis and Evolving Biotechnology*, (Sliver, S., *et al.*, eds.), pp 343-351, American Society for Microbiology, Washington, D.C.
- Pasloske, B. L., *et al.* (1988) "Two Unusual Pilin Sequences from Different Isolates of *Pseudomonas aeruginosa*", *J. Bacteriol.* 170:3738-3741.
- Yu, L., *et al.* (1994) "Adherence of *Pseudomonas aeruginosa* and *Candida albicans* to Glycosphingolipid (Asialo-GM₁) Receptors Is Achieved by a Conserved Receptor-Binding Domain Present on Their Adhesins", *Infect. Immun.* 62:5213-9.

- Sheth, H.B., *et al.* (1994) "The pili of *Pseudomonas aeruginosa* strains PAK and PAO bind specifically to the carbohydrate sequence β GalNAc(1-4) β Gal found in glycosphingolipids asialo-GM₁ and asialo-GM₂", *Mol. Microbiol.* 11:715-23.
- Doig, P., *et al.* (1990) "Inhibition of Pilus-Mediated Adhesion of *Pseudomonas aeruginosa* to Human Buccal Epithelial Cells by Monoclonal Antibodies Directed against Pili", *Infect. Immun.* 58:124-130.
- Lee, K.K., *et al.* (1989) "Immunological Studies of the Disulfide Bridge Region of *Pseudomonas aeruginosa* PAK and PAO Pilins, Using Anti-PAK Pilus and Antipeptide Antibodies", *Infect. Immun.* 57:520-526.
- Sheth, H.B., *et al.* (1995) "Development of an anti-adhesive vaccine for *Pseudomonas aeruginosa* targeting the C-terminal region of the pilin structural protein", *Biomed. Pept. Proteins and Nucleic Acids* 1:141-148.
- Spangenberg, C., *et al.* (1995) "Comparison of type IV-pilin genes of *Pseudomonas aeruginosa* of various habitats has uncovered a novel unusual sequence", *FEMS Microbiol Lett* 125:(2-3):265-273.
- Koga, T., *et al.* (1993) "Genetic and functional characterization of the gene cluster specifying expression of *Pseudomonas aeruginosa* pili", *Infect Immunol* 61(4):1371-1377.
- Sastry, P.A., *et al.* (1985) "Comparative studies of the amino acid and nucleotide sequences of pilin derived from *Pseudomonas aeruginosa* PAK and PAO", *J. Bacteriol.* 164(2):571-577.
- Johnson, K., *et al.* (1986) "Nucleotide sequence and transcriptional initiation site of two *Pseudomonas aeruginosa* pilin genes", *J. Biol Chem.* 261(33):15703-15708.
- Castric, P.A., *et al.* (1989) "Cloning and sequencing of the *Pseudomonas aeruginosa* 1244 pilin structural gene", *Mol Gen Genet* 216(1):75-80.
- Strom, M.S., *et al.* (1986) "Cloning and expression of the pilin gene of *Pseudomonas aeruginosa* PAK in *Escherichia coli*", *J. Bacteriol.* 165(2):367-372.
- Yi, T.M., *et al.* (1993) "Protein secondary structure prediction using nearest-neighbor methods", *J Mol Biol.* 232(4):1117-1129.
- Viswanadhan, V.N., *et al.* (1991) "New joint prediction algorithm (Q₇-JASEP) improves the prediction of protein secondary structure", *Biochemistry* 30(46):11164-11172.
- King, R.D., *et al.* (1990) "Machine learning approach for the prediction of protein secondary structure", *J Mol Biol* 216(2):441-457.
- Biou V., *et al.* (1988) "Secondary structure prediction: combination of three different methods", *Protein Eng* 2(3):185-191.

- Corrigan, A.J. (1982) "A BASIC microcomputer program for plotting the secondary structure of proteins", *Comput Programs Biomed.* 15(3):163-168.
- Tripet, B.L., *et al.* (1996) "Engineering a *de novo*-designed coiled-coil heterodimerization domain for the rapid detection, purification and characterization of recombinantly expressed peptides and proteins", *Protein Eng* 9:1029-1042.
- Chao, H., *et al.* (1998) "Use of a heterodimeric coiled-soil system for biosensor application and affinity purification", *J. Chrom A.* 715:307-329.
- Zhou N.E., *et al.* (1993) "A single-stranded amphipathic α -helix in aqueous solution: design, structural characterization, and its application for determining α -helical propensities of amino acids", *Biochemistry* 32:6190-6197.
- Gunasekaran, K., *et al.* (1998) "Stereochemical Punctuation Marks in Protein Structures: Glycine and Proline Containing Helix Stop Signals", *J Mol Biol* 6:917-932.
- Paranchych, W., *et al.* (1988) "The physiology and biochemistry of pili", *Advan Microbiol Phys* 29:53-114.
- Paranchych, W., *et al.* (1979) "Biochemical studies on pili isolated from *Pseudomonas aeruginosa* strain PAO", *Can J. Microbiol* 25:1175-1181.
- Pasloske B.L., *et al.* (1988) "The expression of mutant pilins in *Pseudomonas aeruginosa*: fifth position glutamate affects pilin methylation", *Mol Microbiol* 2:489-495.
- Pasloske, B.L., *et al.* (1985) "Cloning and sequencing of the *Pseudomonas aeruginosa* PAK pilin gene", *FEBS Lets* 183:408-412.

Applicants look forward to early and favorable consideration of this matter.

Respectfully submitted,

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